

SCE&G Customers Have Paid \$1.4B For Unfinished Nuclear Reactors

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Westinghouse Bankruptcy, Toshiba Turmoil Could Spell End For Reactors, Higher Rates For Customers

By *RON AIKEN*

Years behind schedule and billions over budget, the only power South Carolina Electric and Gas' (SCE&G) two unfinished reactors at the VC Summer Nuclear Plant have produced has been the ability to bankrupt U.S. energy blue blood Westinghouse Electric and potentially waste \$1.4 billion in rate increases it charged customers for a project the utility may be forced to abandon.

The stakes could not be higher for an economic disaster that stretches from Jenkinsville to Japan and has thrown Westinghouse's parent company, Japanese tech-giant Toshiba, into such financial jeopardy that right now, as Pres. Donald Trump meets with Chinese President Xi Jinping, administration officials are crafting a strategy with the Japanese government to counter any efforts by a Chinese company to buy out Toshiba and attempt to gain access to U.S. and Japanese nuclear trade secrets.

The losses, which financial sources report could ultimately cost Toshiba \$10 billion, already have claimed Toshiba's President Satoshi Tsunakawa and turned the stock of SCANA (the parent company of SCE&G, for whom the reactors are being built) into the worst-performing member of the S&P 500 Utilities Index so far in 2017. Just two weeks ago a report by Stephen Byrd, Morgan Stanley's head of North American Equity Research, projected SCANA's cost overruns for the project at \$5.2 billion.

With Westinghouse's collapse into the protection of bankruptcy on March 29, not only have SCE&G customers not seen a positive return on their billion-dollar investment, they've seen that investment disappear along with, quite possibly, the likelihood of the reactors ever getting finished at all.

THE NUCLEAR OPTION

Locally, few eyebrows have been raised as SCE&G has meted out yearly rate hikes to finance construction of the two new reactors that have totaled nearly 20 percent since 2009. To-date, those increases have collected \$1.4 billion, a number expected to grow \$1.9 billion by the end of 2017.

"SCE&G began increasing rates in 2009 to cover financing for the new units," said Shannon Hudson, deputy chief counsel of the Office of Regulatory Staff (ORS) which regulates utilities in South Carolina and is charged by law with representing the public interest. "This process, called 'revised rates,' is authorized by the Base Load Review Act and may occur every twelve months."

SCE&G has taken advantage of the provision and "revised" its rates upward every year since.

"The state legislature passed a bad, bad bill in the Base Load review Act back in 2007," said Rep. Kirkman Finlay (R-Richland). "SCE&G is only doing what (the legislature) allowed them to do."

"This is on us (the legislature). I'm a big believer that nuclear power is viable, but this financing method is terrible."

Finlay is one of five sponsors of H. 4022, a proposed bill that would prevent a utility from financing specific projects in the manner allowed now.

"(The bill) has left the ratepayers exposed to the vagary of management on nuclear projects," Finlay said. "You simply cannot finance something on the backs of consumers."

In 2009, the average price for using 1,000 kilowatt hours was \$114.68, and that year SCE&G collected \$9.6 million toward the reactors' financing. Today that rate is \$147.53, and SCE&G is expected to earn \$445,002,808 in revenue to cover project financing.

SCE&G Cumulative Rate Increases Approved Under the Base Load Review Act

Docket	Year	Approved Increase	Estimated Cumulative Impact									
			2009	2010	2011	2012	2013	2014	2015	2016	2017	
2008-196-E	2009	7,802,491	5,851,868	7,802,491	7,802,491	7,802,491	7,802,491	7,802,491	7,802,491	7,802,491	7,802,491	7,802,491
2009-696-E	2009	22,533,000	3,755,500	22,533,000	22,533,000	22,533,000	22,533,000	22,533,000	22,533,000	22,533,000	22,533,000	22,533,000
2010-157-E	2010	47,301,000		7,883,500	47,301,000	47,301,000	47,301,000	47,301,000	47,301,000	47,301,000	47,301,000	47,301,000
2011-207-E	2011	52,783,342			8,797,224	52,783,342	52,783,342	52,783,342	52,783,342	52,783,342	52,783,342	52,783,342
2012-186-E	2012	52,148,913				8,691,486	52,148,913	52,148,913	52,148,913	52,148,913	52,148,913	52,148,913
2013-150-E	2013	67,240,232					11,206,705	67,240,232	67,240,232	67,240,232	67,240,232	67,240,232
2014-187-E	2014	66,238,000						11,039,667	66,238,000	66,238,000	66,238,000	66,238,000
2015-160-E	2015	64,526,000							10,754,333	64,526,000	64,526,000	64,526,000
2016-224-E	2016	64,247,813								5,368,984	64,247,813	64,247,813
Total			9,607,368	38,218,991	86,433,715	139,111,319	193,775,451	260,848,645	326,801,311	385,943,978	445,002,808	

Estimated Cumulative Impact of Approved Increases 2009-2016

1,440,740,778

Estimated Cumulative Impact of Approved Increases 2009-2017

1,885,743,586

While ratepayers were doing their part, the project’s contractors were not.

Multiple construction delays and project problems at the VC Summer site and another nuclear site in Georgia created skyrocketing costs that Westinghouse ultimately could not absorb, and Toshiba’s \$5.4 billion purchase of Westinghouse in 2006 has turned into a \$10 million liability for Toshiba, multiple financial sources report.

Though Toshiba repeatedly has told SCANA it remains committed to completing the reactors, those statements are not binding financial guarantees, and the additional millions that the setbacks continue to cause only worsen Toshiba’s position.

And while SCANA has taken measures to protect itself, including securing a letter of credit for \$45 million from Toshiba and intellectual property rights, none of those measures comfort ORS executive director Dukes Scott.



SCE&G places Containment Vessel component at V.C. Summer

“As the situation worsened with overages and delays back in December, we did not have any confidence in Westinghouse or SCE&G complying with the schedules they had presented to us in the past,” Scott said. “And now Westinghouse is in bankruptcy and everything is in transition while (SCE&G) tries to figure out what to do.

“There’s a lot that’s up in the air right now.”

As part of its bankruptcy filings, on March 29 Westinghouse entered into a 30-day interim agreement with SCE&G and Santee Cooper (which finances 45 percent of the project) that ORS characterized on Monday as allowing “work to continue on the Project during a transition and evaluation period ... with an overall goal of determining the most prudent path forward.”

Scott said the choices of paths, at least, are clear: continue with construction of both units; focus on one unit and delay the other; focus on one unit and abandon the other; or abandon both units entirely.

If SCE&G chooses to continue and find someone else to take over, the earliest that reactor two could come online is April 2020, multiple sources report, with the third reactor likely coming online eight months later.

Should the reactors be delayed into 2021, however, SCE&G and Santee Cooper could lose out on \$2.2 billion in federal nuclear production tax credits intended as refunds for customers. That credit requires new plants to be operational no later than Dec. 31, 2020.

Abandoning both reactors, Finlay said, would be a worst-case scenario for SCE&G customers because not only would customers have seen \$1.4 billion of their money go down the drain, they also would be the ones responsible for helping SCE&G recover because by law SCE&G may recoup its losses on the project from its customers through rate increases to the extent its expenditures are proven.

Mike Couick, CEO of the Electric Cooperatives of South Carolina, said the worst-case option for everyone is not knowing the plan for what lies ahead, which is the case at this moment.

“We need to know what our real options are in order to make good decisions, and the key elements are scope, schedule and cost,” Couick said. “In other words, we need a pricetag and a roadmap.

“Myself and others continue to look for that and continue to be disappointed in the continuing reluctance or refusal of Westinghouse and Toshiba to provide a schedule and cost. It may be that the best way forward is for SCANA to abandon the project, but we have no idea right now what the costs really are.”

In fact, experts such as Morgan Stanley’s Byrd say abandoning the project might be the only realistic answer for SCANA and Southern Co., which owns the Georgia nuclear site that also has two unfinished reactors Westinghouse is under contract to build.

“In the event that Westinghouse is unable to complete the plants and a new contractor is required, we believe Southern and SCANA would reassess the costs to determine whether it is still prudent to continue,” Byrd wrote in a report published March 22. “We think there is a chance that the companies find the impact to consumers would be too great.”

SNOWBALL EFFECT

Westinghouse wasn’t the first contractor to run into cost overruns and delays, just the latest.

“The project at Jenkinsville has changed a number of times,” Couick said. “In 2009, the estimated gross cost of the project was roughly \$11.5 billion, with estimated completion dates of April 2016 and January 2019. By 2011, with a change in the cost of money, of borrowing, we were told the cost had gone down to \$10.5 billion with the same completion dates.

“In 2012 the cost stayed the same but the completion dates were pushed back to March of 2017 and May of 2018. By 2015 the cost had risen to \$12.4 billion and the dates pushed to June 2019 and June 2020.”

Brought on board in October 2015 to replace the problems created by setbacks from CB&I Stone & Webster, Westinghouse subsequently bought that business for \$229 million in order to resolve disputes related to previous cost issues.

Rather than provide a solution to delays and overruns, however, Westinghouse added to them as its own debt began to grow substantially due to existing issues at both VC Summer and the Georgia site coupled with a gross underestimation of the problems and costs it inherited when it bought CB&I Stone & Webster.

If anything, Westinghouse’s issues accelerated the problem to crisis levels.

“Despite the problems on Nov. 28 of last year a fixed-price contract was signed between Westinghouse and SCE&G for \$13.9 billion with completion dates of June 2019 and June 2020,” Couick said.

Just a month later, Toshiba was forced to admitted the true scope of the problem it inherited.

“Westinghouse has found that the cost to complete the U.S. projects will far surpass the original estimates, mainly due to increases in key project parameters, resulting in far lower asset value than originally determined,” Toshiba said in a Dec. 27, 2016 release. By March, Westinghouse declared bankruptcy.

The ORS’s concerns about Westinghouse’s financial position and eroding faith in Toshiba’s ability to guarantee its debts increased exponentially in the months leading to the company’s declaration of bankruptcy, concerns expressed to SCANA CEO Kevin Marsh in a series of letters dating from Dec. 29, 2016 to March 20.

“Our interest in seeing the Revised Project Schedule has been intensified by recent events,” Scott wrote Marsh on Dec. 29, 2016. “ORS is deeply concerned regarding statements in Toshiba’s Dec. 27, 2016 press release that indicate it is facing massive losses relating to the nuclear operations of Westinghouse.”

“Now that Toshiba has announced significant charges to be written off against the Westinghouse nuclear operations, ORS’s concerns about the status of the Summer Project are renewed and increased.

“These developments call into question the ability of Toshiba to stand behind the additional losses that may need to be incurred to complete the Units.”

On March 8, Scott wrote Marsh asking to be included at a March 13 meeting conducted by Westinghouse to brief SCE&G on schedule revisions for reactors two and three.



Summer unit 3 basemat pour.

“The press conference held by Toshiba on February 14 indicated that Toshiba’s estimate of both the time needed to complete the project and its cost to complete the project have increased,” Scott wrote. “ORS has also seen several news articles regarding the possibility of Westinghouse seeking relief under bankruptcy laws.

“Given the delays in the completion of this schedule and the amount of contradictory information in the press regarding this project, ORS is requesting to be allowed to send an observer to this meeting between SCE&G and Westinghouse.”

“The availability of the schedule is critical to ORS’s review of the project and we cannot keep waiting while delays continue to mount.”

Marsh denied that request.

For SCE&G ratepayers who will have contributed nearly \$2 billion by year’s end, the only certainty is more rate hikes are in the future no matter whether SCE&G pivots toward completion of the reactors or away from it.

Finlay said such an outcome is intolerable.

“This is the theater of the absurd,” Finlay said. “I think while abandonment isn’t the choice of anybody, (SCE&G) may have to do it, and think about what that means for the ratepayer.

“If they abandon, you have more than a billion dollars wasted, the consumers lose and the shareholders (of SCANA) are OK. If it works out, the consumers lose and the shareholders make money.

“There is no upside to the consumer.”

Finlay also said some potentially negative repercussions have yet to fully be considered.

“First, I’m not even sure that SCE&G’s base is big enough to pay for a screw-up of this magnitude,” Finlay said. “And second, no large power-using industry is going to be able to afford to move into SCE&G territory unless SCE&G gives them a huge rate cut.

“So once again, the little guy will be paying for the big guy.”

For Scott, the public interest has not been well served by the project, one that has gone so wrong as to have truly global implications.

“We were hopeful the projects could be completed, but we don’t want to throw good money after bad now,” Scott said. “We certainly would have liked to have seen the reactors built on time, but that’s not where we are.

“It’s very sad.”

It’s also sad personally, Scott confessed.

“I’m an SCE&G customer.”

SCE&G spokesperson Eric Boomhower did not immediately return requests for comment.

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